

1 I claim:

2 1. An LED light apparatus for producing a collinear beam of white or colored

3 light comprising:

4 a housing;

5 at least three sets of LED light assemblies contained within said housing, wherein

6 each of said sets of LED light assemblies is comprised of a plurality of LED lights,

7 said LED lights being arranged in a geometric pattern, and wherein said LED lights

8 contained within each of said sets of LED light assemblies are of the same color,

9 said LED lights being of different colors between said sets of LED light assemblies;

10 a dichroic bandpass filter located between said sets of LED light assemblies;

11 a dichroic notch filter located between said sets of LED light assemblies intersecting

12 said dichroic bandpass filter;

13 a power driver connected to each of said sets of LED light assemblies; and

14 a microcontroller connected to said power driver.

15 2. The LED light apparatus for producing a collinear beam of white or colored light

16 of Claim 1 wherein said at least three sets of LED light assemblies contain LED

17 lights of blue, red, and green forming blue LED light assembly, red LED light

18 assembly, and green LED light assembly.

19 3. The LED light apparatus for producing a collinear beam of white or colored light

20 of Claim 1 wherein the perimeter of said housing comprises a plurality of heat sinks

21 to dissipate heat from said LED light apparatus.

- 1 4. The LED light apparatus for producing a collinear beam of white or colored light
2 of Claim 2 wherein said housing incorporates a light emission screen for emitting the
3 produced collinear beam of white or colored light.
- 4 5. The LED light apparatus for producing a collinear beam of white or colored light
5 of Claim 4 wherein said blue LED light assembly is arranged at right angles to said
6 red LED light assembly.
- 7 6. The LED light apparatus for producing a collinear beam of white or colored light
8 of Claim 5 wherein said green LED light assembly is arranged at right angles to said
9 red LED light assembly.
- 10 7. The LED light apparatus for producing a collinear beam of white or colored light
11 of Claim 6 wherein said dichroic bandpass filter is at a 90 degree angle with said
12 dichroic notch filter.
- 13 8. The LED light apparatus for producing a collinear beam of white or colored light
14 of Claim 7 wherein said green LED light assembly and said blue LED light assembly
15 are placed on opposing sides of each other.
- 16 9. The LED light apparatus for producing a collinear beam of white or colored light
17 of Claim 1 wherein said geometric pattern is an a x a pattern.
- 18 10. The LED light apparatus for producing a collinear beam of white or colored light
19 of Claim 1 wherein said geometric pattern is an a x b pattern.
- 20 11. The LED light apparatus for producing a collinear beam of white or colored light
21 of Claim 1 wherein said geometric pattern is a honeycomb pattern.

1 12. The LED light apparatus for producing a collinear beam of white or colored light
2 of Claim 1 wherein said geometric pattern is a hexagon pattern.

3 13. The LED light apparatus for producing a collinear beam of white or colored light
4 of Claim 1 wherein said dichroic bandpass filter and said dichroic notch filter
5 intersect to form an x-pattern.
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